

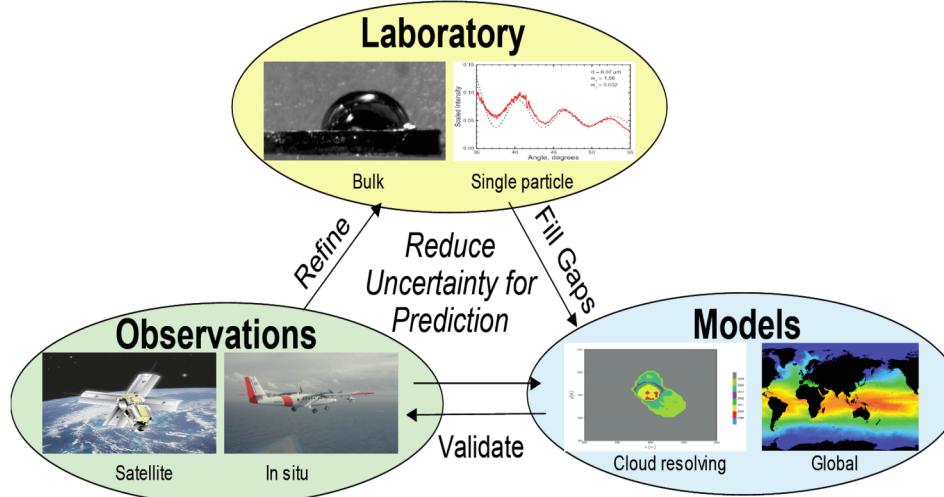
Resolving the Aerosol-Climate-Water Puzzle: Observations of Absorbing Aerosols in Clouds during MASE

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P. Chylek, J. Reisner, B. Henson, C. Jeffery, W. Porch, W. S. Smith, C. Mazzoleni, S. Brumby, A. Davis, B. Henderson, S. Olsen, M. Andrejczuk, D. Moulton, R. Bleck, L. Smilowitz, J. Stephens, T. Rahn, A. Jacobsen, J. Anderson, P. Jones, and G. Altmann Los Alamos National Laboratory

P. Arnott (UNV), U. Lohmann (ETH-Zurich), J. Seinfeld's Group (Caltech)

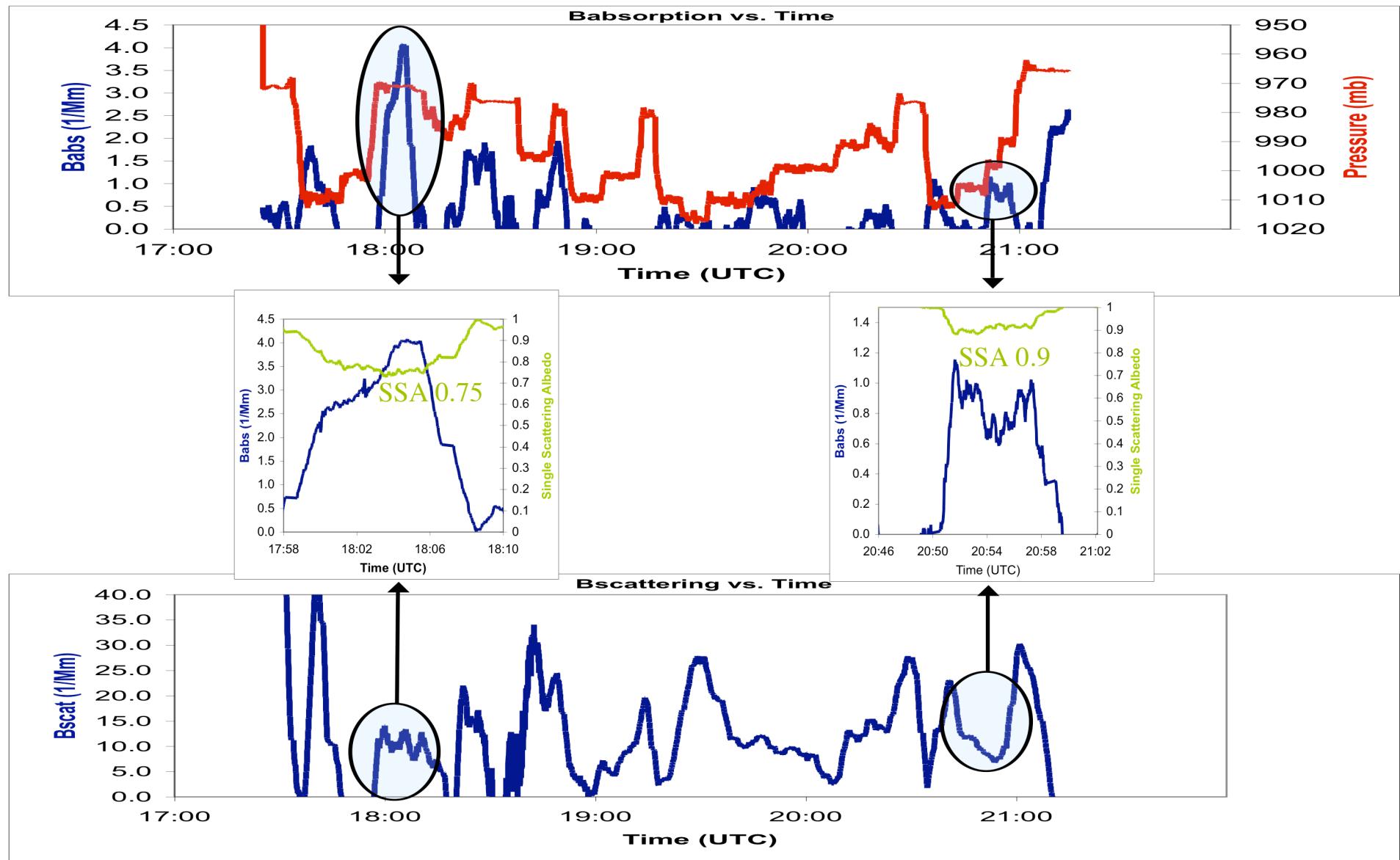
Funded by LANL's LDRD program



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C. Mazzoleni, M. K. Dubey (LANL), P. Arnott (UNR), J. Seinfeld (Caltech)

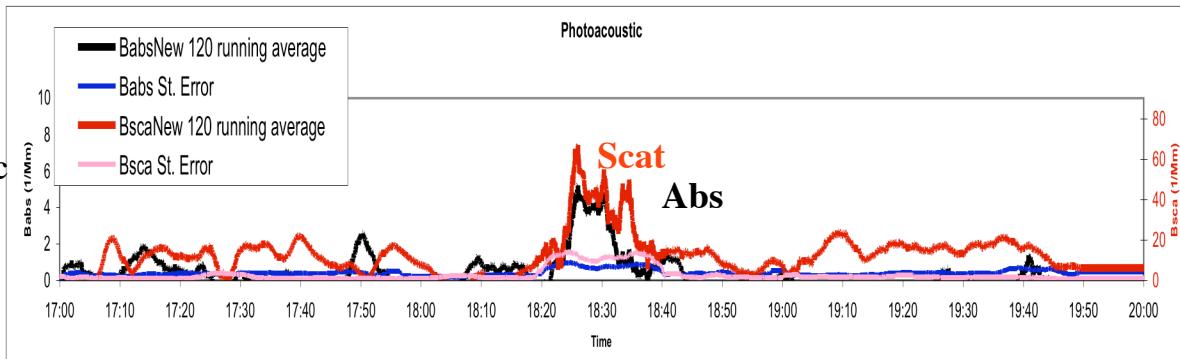
MASE: In situ Absorption & Scattering Measurements: 17 July '05



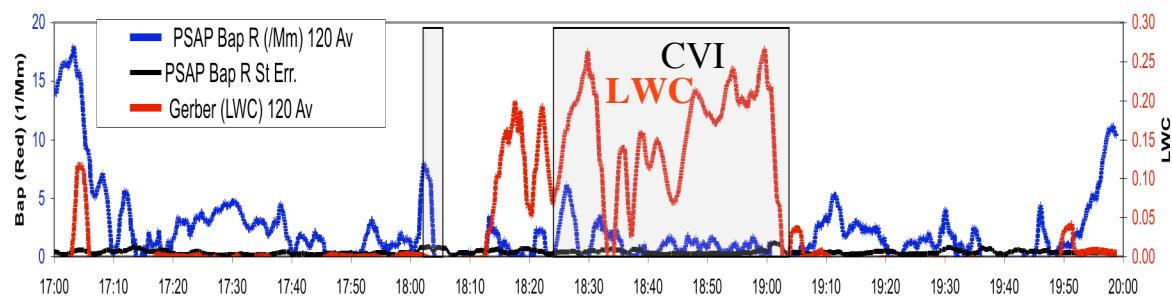
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What is the distribution & state of absorbing aerosol (BC) in clouds? MASE, 15 July 05 CIRPAS Flight

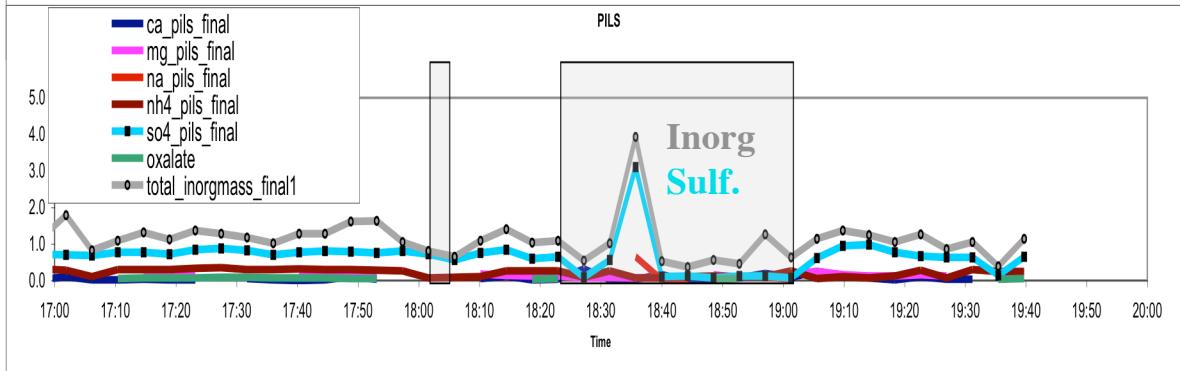
Interstitial Absorbing
Aerosol Photo-acoustic



Cloud Drop Absorbing
PSAP (CVI)



Chemistry
PILS



Observed BC
fraction in
cloud inter-
stitial air

11% (15July)
60% (5July)

More Analysis

???

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Optical Properties of Interstitial Plume Inside Clouds: MASE

